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Notice of Allowability	Application No.	Applicant(s)	
	10/721,823	ZHAO ET AL.	
	Examiner	Art Unit	
	Hien D. Vu	2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the communication on 1/6/06.
2. ☒ The allowed claim(s) is/are 1-7,9,11-14,16,18-22,24 and 26.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>1/7/06</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |


HIEN VU
PRIMARY EXAMINER

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Marcus Mickney on 1/19/06.

The application has been amended as follows:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) An electrical connector, comprising:
 - an elongated body with first and second end sections, a mid-section disposed between said first and second end sections, and a transition shoulder disposed between said first end section and said mid-section, said mid-section being radially larger than each of said first and second end sections and including an outer surface, said transition shoulder including a face wall extending between said outer surface of said mid-section and an outer surface of said first end section; and
 - a plurality of radial indicator ribs circumferentially spaced about and extending axially along and radially outwardly from said outer surface of said mid-section, each of said radial indicator ribs including an abutment surface laterally offset from said face wall of said transition shoulder and adapted to abut a portion of a mating electrical connector receiving said first end section, and a ground connection extending outwardly from said mid-section and remote of said abutment surfaces of said plurality of radial indicator ribs.

2. (original) An electrical connector according to claim 1, wherein
each of said abutment surfaces of said radial indicator ribs forms a step with
said face wall of said transition shoulder adapted to receive the portion of
the mating electrical connector.
3. (original) An electrical connector according to claim 1, wherein
each of said radial indicator ribs extends outwardly from said mid-section of
said body radially beyond all portions of said body.
4. (original) An electrical connector according to claim 1, wherein
each of said abutment surfaces of said radial indicator ribs are substantially
perpendicular to said outer surface of said mid-section in transverse
cross-section of said body.
5. (original) An electrical connector according to claim 1, wherein
said body is formed of a dielectric material; and
said mid-section includes an outer conductive jacket.
6. (original) An electrical connector according to claim 1, wherein
each said radial indicator ribs is formed as a unitary one-piece member with
said outer conductive jacket.
7. (original) An electrical connector according to claim 1, wherein
said mating electrical connector is a high voltage cable connector.
8. (canceled) An electrical connector according to claim 1, wherein
a ground connection is disposed on said mid-section spaced from each of
said ribs for connecting said body to ground.

9. (currently amended) An electrical connector, comprising:
- an elongated body with first and second end sections, a mid-section disposed between said first and second end sections, and a transition shoulder disposed between said first end section and said mid-section, said mid-section being radially larger than each of said first and second end sections and including an outer surface, said transition shoulder including a face wall extending between said outer surface of said mid-section and an outer surface of said first end section; and
- a plurality of radial indicator ribs circumferentially spaced about and extending axially along and radially outwardly from said outer surface of said mid-section, each of said plurality of radial indicator ribs including an abutment surface laterally offset from and substantially parallel to said face wall of said transition shoulder defining a step therebetween adapted to receive a portion of a mating electrical connector receiving said first end section with substantially no space between the portion of the mating electrical connector and said abutment surfaces of said plurality of radial indicator ribs, and a ground connection extending outwardly from said mid-section and remote of said abutment surfaces of said plurality of radial indicator ribs.
10. (canceled) An electrical connector according to claim 9, wherein
- a second radial indicator rib extends from said outer surface of said mid-section and includes an abutment surface laterally offset from said face wall of said transition shoulder.
11. (original) An electrical connector according to claim 9, wherein
- the portion of the mating electrical connector abuts said abutment surface of said radial indicator rib.
12. (currently amended) An electrical connector according to claim 9, wherein

said plurality of radial indicator ribs extends radially outwardly from said mid-section of said body beyond all portions of said body.

13. (currently amended) An electrical connector according to claim 9, wherein said mid-section includes an outer conductive jacket; and said plurality of radial indicator ribs forms a unitary one-piece member with said outer conductive jacket.
14. (original) An electrical connector according to claim 9, wherein said mating electrical connector is a high voltage cable connector.
15. (canceled) An electrical connector according to claim 9, wherein a ground connection is disposed on said mid-section spaced from said rib for connecting said body to ground.
16. (currently amended) An electrical connector assembly, comprising:
 - a first electrical connector including
 - an elongated body with first and second end sections, a mid-section disposed between said first and second end sections, and a transition shoulder disposed between said first end section and said mid-section, said mid-section being radially larger than each of said first and second end sections and including an outer surface, said transition shoulder including a face wall extending between said outer surface of said mid-section and an outer surface of said first end section, and
 - a plurality of radial indicator ribs circumferentially spaced about and extending axially along and radially outwardly from said outer surface of said mid-section, each of said plurality of radial indicator ribs including an outer surface and an abutment surface laterally offset from said face wall of said transition shoulder defining a step

therebetween, and a ground connection extending outwardly from said mid-section and remote of said abutment surfaces of said plurality of radial indicator ribs; and

a second electrical connector including a port receiving said first end section of said first electrical connector and a cuff terminating said port, said cuff being received in said step of said first connector with an end portion of said cuff in close proximity with said abutment surfaces of said plurality of radial indicator ribs.

17. (canceled) An electrical connector assembly according to claim 16, wherein a plurality of radial indicator ribs extend from said outer surface of said mid-section and each includes an abutment surface laterally offset from said face wall of said transition shoulder; and each of said radial indicator ribs defining a step between said abutment surface and said face wall of said transition shoulder for receiving said cuff of said second electrical connector with a portion of said cuff abutting each of said abutment surfaces.
18. (currently amended) An electrical connector assembly according to claim 16, wherein said abutment surfaces of said plurality of radial indicator ribs is are substantially parallel to said face wall of said transition shoulder.
19. (currently amended) An electrical connector assembly according to claim 16, wherein said abutment surfaces of said plurality of radial indicator ribs is are disposed on a wall of said rib that extends radially outwardly from said mid-section beyond said cuff of said second electrical connector and beyond any portion of said first electrical connector.

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20. (currently amended) An electrical connector assembly according to claim 16, wherein
said cuff of said second electrical connector covers said step without covering
said outer surfaces of said plurality of radial indicator ribs.
21. (currently amended) An electrical connector assembly according to claim 16, wherein
each of said plurality of radial indicator ribs is molded to said mid-section of
said first electrical connector.
22. (original) An electrical connector assembly according to claim 16, wherein
said first electrical connector is a high-voltage bushing insert and said second
electrical connector is a high-voltage cable connector.
23. (canceled) An electrical connector assembly according to claim 16, wherein
a ground connection is disposed on said mid-section spaced from said rib for
connecting said first electrical connector to ground.
24. (currently amended) A method of mating first and second electrical connectors,
the first connector including first and second end sections with a mid-section
therebetween and a transition shoulder disposed between the first end section
and the mid-section, and the second connector including a port sized to
accommodate the first end section of the first electrical connector and a cuff
terminating the port, comprising the steps of:
inserting the first end of the first electrical connector into the port of the
second electrical connector;
covering an outer surface of the transition shoulder of the first electrical
connector with the cuff of the second electrical connector; and
placing an surface of the cuff of the second electrical connector in close
proximity with an abutment surface of each of a plurality of radial indicator

ribs circumferentially spaced about and extending axially along and radially outwardly from an outer surface of the mid-section of the first electrical connector and laterally offset from the transition shoulder of the first electrical connector, thereby indicating proper mating between the first and second connectors, the mid-section having a ground connection extending outwardly therefrom and remote of said abutment surfaces of said plurality of radial indicator ribs.


25. (canceled) A method of mating first and second electrical connectors according to claim 24, further comprising the step of
- abutting the surface of the cuff of the second electrical connector with abutment surfaces of a plurality of radial indicator ribs, respectively, extending from the outer surface of the mid-section of the first electrical connector and are laterally offset from the transition shoulder of the first electrical connector.
26. (original) A method of mating first and second electrical connectors according to claim 24, wherein
- said first electrical connector is a high voltage bushing insert and said second electrical connector is a high voltage cable connector.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hien D. Vu whose telephone number is 571-272-2016. The examiner can normally be reached on 9-5.

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HV
1/20/06


HIEN VU
PRIMARY EXAMINER